REMARKS

Claim 1 has been amended to make it clear that what is claimed are a water soluble salts of a specific class of fullerene polycarboxylic acids. So far as the definition of m is concerned, the original definition of "preferably 3 and 5 has been amended to "at least 3". An effective upper limit on the value of m is provided by the requirement that the salt claimed is water soloble. Support for the definition of the cation as being "pharmaceutically acceptable" is found at page 8 lines 3-4 of the specification.

It is submitted that as amended the requirements of 35 USC 112 are met.

Turning now to the rejection under 35 USC 102, the Examiner alleges that pending claim 1 is anticipated by the disclosure of Gan et al. (Chinese Chemical Letters, 1994,5,4,275-278). However, Gan et al. teaches a single derivative of fullerene containing 9 beta-alanine residues covalently bound per fullerene moiety. Therefore, this compound does not would fall within the general formula of claim 1 which requires claimed compounds to have an anion of the formula $C_{60}H_n[NH(CH_2)_mC(O)O^-]_n$ where m is at least 3. The compound of Gan et al is one where m=2 and n=9. Clearly, this compound is distinct from the water-soluble compound of fullerene polycarboxylic anions as claimed in amended claim 1 where "m is an integer greater than or equal to 3".

The Applicant respectfully requests that the rejection of claim 1 on the grounds of alleged lack of novelty be withdrawn.

Turning now to the requirements of 35 USC 103, the Examiner alleges that pending claims 4-5 are unpatentable (obvious) over Gan et al. (Chinese Chemical Letters, 1994,5,4,275-278) in view of Chiang (US 5,648,523). As noted above, Gan et al. teaches a single fullerene-polyamino acid compound in the two forms (derivative A - sodium salt, derivative B - free acid form) that is clearly

distinct from the compounds as claimed in the amended claims. Gan et al's. disclosure is in the form of a research paper related merely to the synthetic procedure and physical-chemical properties of the above compound and reports that "the remarkable solubility of these derivatives in water makes them good precursors for further derivatization study, such as complexation with metal ions especially rare earth metal ion" (see p. 277, lines 4 and 5 from the bottom of the page). Thee is no suggestion that the specific fullerene derivative produced by the addition reaction of beta-alanine could be of any potential pharmaceutical relevance. Nor is there any suggestion of modifying it, except by the further derivatization referred to. This would not result in the compounds or compositions of the present invention.It is submitted that the prior art referred to by the Examiner contains no hints to use the above compound as a medicament; on the contrary, this prior art teaches away from any medical use as the only potential utility of the disclosed derivatives envisaged by Gan et al. consists in that they can serve as "good precursors for further derivatization study, such as complexation with metal ions especially rare earth metal ion". Given that the compounds of the instant invention are clearly distinct from the compound disclosed in Gan et al. the Applicant respectfully submits that the claimed invention (pharmaceutical composition of claims 4 and 5) shall be deemed non-obvious.

The other prior art document mentioned by the Examiner, US 5,648,523 teaches an extremely broad group of fullerene derivatives which, however, does not encompass the water-soluble compounds of fullerene polycarboxylic anions of the instant invention characterized by the general formula $C60H_n[NH(CH_2)_mC(O)O]_n$' The prior art compounds are asserted to be scavengers of free radicals. In the Applicant's opinion, the mere fact that certain fullerene derivatives capable of scavenging free radicals could be formulated into pharmaceutical compositions would not lead one of ordinary skill in the art to formulate any other fullerene derivative that might potentially be toxic or produce other adverse effects in a living organism into a pharmaceutical composition no matter what the particular dosage form is - a tablet, a capsule, a suppository or a solution for injections.

The Applicant respectfully submits that neither considered alone nor taken in combination the prior art documents Gan et al. and US 5,648,523 could compromise non-obviousness of the inventions according to claims 4 and 5, or indeed any of the other claims .It is therefore submitted that the requirements of 35 USC 103 have been met.

In view of the foregoing, it is respectfully submitted that this application is in order for allowance and an early action to this end is respectfully solicited.

Respectfully submitted,

JOHN RICHARDS
C/O LADAS & PARRY LLP
26 WEST 61ST STREET
NEW YORK, NEW YORK 10023
REG. NO. 31053
TEL. NO. (212) 708-1915